Index to Volume 37

SUBJECTS

Abiotic factors, winter 1:16 A Abstracts, biological 7:431 F

notes from 6:354 F questionnaire 6:341 E Accommodation 1:28 A Accountability 2:117 L Acquisitiveness 8:473 A Acrylic plastic 9:554 F Action learning 8:469 A Action-oriented research 1:49 F Activities, environmental 7:422 A Adaptability 2:75 E; 4:203 E Adaptations 3:150 A Adapting to new circumstances 3:141 E Administrators 9:546 F Advantages of bacteria bank 2:102 A

of January term 5:297 F Advertising impact on diet 1:19 A Affective objectives 8:489 F; 9:533 A Air inversion column 9:554 F Air plant 5:281 A Air pollution 3:168 A Alternative curricula 2:79 A Alternative, educational 6:355 L Alternatives to required courses 3:179 F American diet, quality of 1:19 A American Red Cross 6:372 P; 6:373 P American scientists by ethnic origin 5:295 F

Analysis of questions in textbook 8:477 A Anaphase 2:105 A

Anatomy

as basis for locomotion 3:150 A of Bryophyllum 5:281 A of the pea 2:113 F

Anesthesia 9:548 F Animal and Plant Health Inspection Service (APHIS) 8:489 F Animal protein 7:402 A

Animals, student attitudes towards

Anthropomorphic interpretation 8:466 A Antiscientific mind 8:465 E Apparatus, construction of 9:554 F

Apparatus

for light-dark cycles 5:298 F for dissection 5:299 F for lake study 2:98 A for respirometer 3:175 F to test gases 7:434 F

Applications of recombinant DNA techniques 3:144 A

Applied science museums 9:524 A Aquarium 9:554 F Aquatic environment 7:413 A Aquaculture 2:76 A Arboretum 9:553 F

The index has three parts: subjects. titles, and authors. Alphabetizing is letter by letter (not word-by-word); for example, "Educational" would precede "Education theory."

SUBJECTS

Everything in Volume 37 is covered except filler items.

This is a multiple index; that is, an item may be indexed in two or more places, to ensure access.

Entries in the first part are keyed to sections of the Title index, as follows: A, articles; F, features; L, letters to the editor; E, editorials; and P, abstracts of papers. The number tells the issue number (no.) and page in the journal. You may go directly to the page, of course, or you may consult the Title index to discover whether the item is the one you are seeking.

The second part of this subject index groups books reviewed in this volume by title. Authors and editors of books, not the reviewers) are mentioned in parentheses preceding the issue-andpage reference. Initial articles (a, an, the) of book titles have been dropped; that is, a title begins with its first substantive word.

holding device for 8:500 F terrestrial 4:211 A Articles about BSCS materials 2:79 A Ascent of Man 5:296 F Assignment options 7:439 F Asilomar Conference 3:144 A Assimilation 1:28 A Attitude modification 6:368 P Attitudes public 7:419 A towards animals 8:491 F

Attractants to control insects 4:242 A Audio-tutorial instruction 5:304 F; 6:371 P; 6:373 P; 6:375 P; 9:546 F Audubon Club 7:422 A Audubon Magazine 6:355 L Autocidal control of insects 4:242 A

Autosomal genes 5:288 A Bacteria bank 2:102 A

Bacteriophage 8:466 A Baseline data, environmental 2:112 F Basic skills

in environmental education 6:357 F in microbiology 2:102 A Beach field trips 8:501 F Beating heart simulation 7:436 F Beetles, dermestid 7:433 F Behavior

muscle as modifier of 6:370 P of wood ducks 6:388 P of primates 6:346 A within a species 8:469 A Behavioral objectives 8:489 F Belief system 6:369 P Benefits of insects 4:208 A Biotic factors, winter 1:16 A Biochemistry 6:375 P

Bioethical consciousness 9:533 A Bioethics 5:292 A Biogenetic law 9:544 F

Biographies 5:295 F Biological abstracts 7:431 F

education 1:48 F Biology

community issues in 8:469 A ethical issues in 3:148 A importance of 1:14 A majors 6:368 P

Biomechanics 3:150 A Biomedical

advances 3:148 A Bios i kits 1:43 A Biosynthesis of proteins 9:537 A Birth control 6:342 A

Black Americans 5:296 F Botany 2:113 F

herbarium techniques 1:40 A introductory 6:366 P Bradford, Candace 6:354 F Breathing and respiration 3:150 A British teacher in America 2:91 A Bronowski, Jacob 5:296 F Bryophyllum 5:281 A BSCS materials 2:79 A; 5:304 F

Budget, living within a 7:431 F Candidate, OBTA 7:426 A Capitalism 6:342 A

Career as an entomologist 4:246 A program 6:368 P

Caribou, seasonal movements of 6:375 P Carrying capacity 6:342 A

Cat anatomy 3:150 A Cell analogue for 2:108 A model of 9:555 F

poem about 6:365 F Change, resistance to 2:75 E Chemical

control of insects 4:242 A insecticides 4:239 A smoke generator 9:554 F tests on water 7:413 A

Index to Volume 37

SUBJECTS

Abiotic factors, winter 1:16 A Abstracts, biological 7:431 F

notes from 6:354 F questionnaire 6:341 E Accommodation 1:28 A Accountability 2:117 L Acquisitiveness 8:473 A Acrylic plastic 9:554 F Action learning 8:469 A Action-oriented research 1:49 F Activities, environmental 7:422 A Adaptability 2:75 E; 4:203 E Adaptations 3:150 A Adapting to new circumstances 3:141 E Administrators 9:546 F Advantages of bacteria bank 2:102 A

of January term 5:297 F Advertising impact on diet 1:19 A Affective objectives 8:489 F; 9:533 A Air inversion column 9:554 F Air plant 5:281 A Air pollution 3:168 A Alternative curricula 2:79 A Alternative, educational 6:355 L Alternatives to required courses 3:179 F American diet, quality of 1:19 A American Red Cross 6:372 P; 6:373 P American scientists by ethnic origin 5:295 F

Analysis of questions in textbook 8:477 A Anaphase 2:105 A

Anatomy

as basis for locomotion 3:150 A of Bryophyllum 5:281 A of the pea 2:113 F

Anesthesia 9:548 F Animal and Plant Health Inspection Service (APHIS) 8:489 F Animal protein 7:402 A

Animals, student attitudes towards

Anthropomorphic interpretation 8:466 A Antiscientific mind 8:465 E Apparatus, construction of 9:554 F

Apparatus

for light-dark cycles 5:298 F for dissection 5:299 F for lake study 2:98 A for respirometer 3:175 F to test gases 7:434 F

Applications of recombinant DNA techniques 3:144 A

Applied science museums 9:524 A Aquarium 9:554 F Aquatic environment 7:413 A Aquaculture 2:76 A Arboretum 9:553 F

The index has three parts: subjects. titles, and authors. Alphabetizing is letter by letter (not word-by-word); for example, "Educational" would precede "Education theory."

SUBJECTS

Everything in Volume 37 is covered except filler items.

This is a multiple index; that is, an item may be indexed in two or more places, to ensure access.

Entries in the first part are keyed to sections of the Title index, as follows: A, articles; F, features; L, letters to the editor; E, editorials; and P, abstracts of papers. The number tells the issue number (no.) and page in the journal. You may go directly to the page, of course, or you may consult the Title index to discover whether the item is the one you are seeking.

The second part of this subject index groups books reviewed in this volume by title. Authors and editors of books, not the reviewers) are mentioned in parentheses preceding the issue-andpage reference. Initial articles (a, an, the) of book titles have been dropped; that is, a title begins with its first substantive word.

holding device for 8:500 F terrestrial 4:211 A Articles about BSCS materials 2:79 A Ascent of Man 5:296 F Assignment options 7:439 F Asilomar Conference 3:144 A Assimilation 1:28 A Attitude modification 6:368 P Attitudes public 7:419 A towards animals 8:491 F

Attractants to control insects 4:242 A Audio-tutorial instruction 5:304 F; 6:371 P; 6:373 P; 6:375 P; 9:546 F Audubon Club 7:422 A Audubon Magazine 6:355 L Autocidal control of insects 4:242 A

Autosomal genes 5:288 A Bacteria bank 2:102 A

Bacteriophage 8:466 A Baseline data, environmental 2:112 F Basic skills

in environmental education 6:357 F in microbiology 2:102 A Beach field trips 8:501 F Beating heart simulation 7:436 F Beetles, dermestid 7:433 F Behavior

muscle as modifier of 6:370 P of wood ducks 6:388 P of primates 6:346 A within a species 8:469 A Behavioral objectives 8:489 F Belief system 6:369 P Benefits of insects 4:208 A Biotic factors, winter 1:16 A Biochemistry 6:375 P

Bioethical consciousness 9:533 A Bioethics 5:292 A Biogenetic law 9:544 F

Biographies 5:295 F Biological abstracts 7:431 F

education 1:48 F Biology

community issues in 8:469 A ethical issues in 3:148 A importance of 1:14 A majors 6:368 P

Biomechanics 3:150 A Biomedical

advances 3:148 A Bios i kits 1:43 A Biosynthesis of proteins 9:537 A Birth control 6:342 A

Black Americans 5:296 F Botany 2:113 F

herbarium techniques 1:40 A introductory 6:366 P Bradford, Candace 6:354 F Breathing and respiration 3:150 A British teacher in America 2:91 A Bronowski, Jacob 5:296 F Bryophyllum 5:281 A BSCS materials 2:79 A; 5:304 F

Budget, living within a 7:431 F Candidate, OBTA 7:426 A Capitalism 6:342 A

Career as an entomologist 4:246 A program 6:368 P

Caribou, seasonal movements of 6:375 P Carrying capacity 6:342 A

Cat anatomy 3:150 A Cell analogue for 2:108 A model of 9:555 F

poem about 6:365 F Change, resistance to 2:75 E Chemical

control of insects 4:242 A insecticides 4:239 A smoke generator 9:554 F tests on water 7:413 A

Chemistry 6:368 P Choices pertaining to land pyramid Citations of BSCS materials 2:79 A Citizen responsibility 6:373 P role in environmental preservation Class size and individualization 9:546 F Class work, during January terms 5:297 F Classification 6:388 P Classroom activities 6:357 F; 6:368 P observations 1:24 A teacher-centered 5:305 F using insects in 4:211 A Cleaning skeletons 7:433 F Coding in gene function 9:545 A Cognitive abilities 7:407 A development 1:28 A level of questioning 6:369 P style 6:368 P Cold-hardiness of insects 4:250 A Collections, herbarium 1:40 A College biology, implications of operational thought for 7:407 A students, cognitive levels of 7:407 A teacher 2:94 A Colonial era, wildlife in 7:419 A Commencement 5:275 E Commercial fishing 2:76 A use of insects 4:208 A Communication 2:88 A among insects 4:205 A Community-issues biology 8:469 A
Community Nutrition Institute 1:19 A Community resources 6:346 A; 6:372 P; 6:374 P; 6:376 P Comparative anatomy of cat and howler monkey 3:150 A Competency-based learning 6:368 P Competition kit 1:43 A Concerned citizenry 7:419 A
Concrete operational thought 7:407 A Concrete operations 1:28 A Congress, attack on 2:117 L Control of insects 4:208 A Consciousness, bioethical 9:533 A Conservationist 7:419 A Construction of equipment 2:98 A Contract approach 6:366 P Contractual learning 8:481 A Controversy 6:355 L about nutrition and food supply 3:162 A Cooperation between institutions 1:49 F to preserve wildlife 7:419 A Corporation analogy for the cell 2:108 A Correspondence course 3:168 A Country founded on diversity 3:141 E Course adoptions 2:79 A Course content, criteria for selecting

8:469 A

Criteria

"Coursy" thinking 3:179 F

8:469 A

Creationism 6:375 P

Crisis, averting 6:342 A

for determining course content

for textbook selection 8:477 A

Creation-evolution debate 6:367 P

Creationist controversy 8:495 F

Crisis eve 9:542 F Cultural and physical control of insects Cultural values 5:277 E Culture supply problem 2:102 A Curandose en salud Project 7:422 A Curricula, role in changing attitudes 8:491 F Curriculum 6:368 P: 7:422 A: 8:483 F: 9:543 F: 9:494 F: 9:546 F correspondence course 3:168 A development 1:49 F; 2: 94 A making of 2:110 F materials 2:79 A required courses in 3:179 F unit on bioethics 5:292 A unit on ethics 3:148 A Cuticle of insects 4:250 A Cyclic photophosphorylation 3:177 F Damage by insects 4:208 A
Dark and light bottle apparatus 2:98 A Darwinism 8:495 F Data collection 8:469 A Data interpretation 6:359 F DDT 3:162 A; 4:239 A Death, lack of control over 8:473 A Decision makers, evaluation for 6:351 A Decision making 6:367 P Deficiencies in vitamins and minerals 1:19 A Degradation, environmental 6:342 A Demonstration of genetic drift 9:551 F of osmosis 3:174 F Demotivators 9:523 E Destructive pests 8:486 F Developing a learning contract 8:481 A Development of chick embryos 8:498 F professional 7:401 E Developmental psychology 1:28 A stages in cognitive abilities 7:407 A Diapause in insects 4:250 A Diethylstilbestrol 3:172 A Difficulties in discussing old text 5:284 A Diffusion 7:405 A Digby, a seventeenth century naturalist 5:284 A Discoveries, factors involved in 5:302 F Discovery, role of chance in 1:52 F Discussion sections 9:533 A Discussions based on seventeenth Discussions based on seventeenth century text Of Bodies. . . 5:284 A Disease vectors, insects as 4:208 A Dissecting tray 5:299 F Diversity 2:75 E; 4:203 E defense of 3:141 E of insects 4:205 A DNA 3:144 A Doctor of arts program 6:375 P Drag and turbulence 3:150 A Drew, Charles 5:296 F

The index has three parts: subjects, titles, and authors. Alphabetizing is letter by letter (not word-by-word); for example, "Educational" would precede "Education theory."

Drift, of insects 4:250 A Drosophila genetics 5:288 A Earth science 6:367 P Ecological bases for insect control 4:242 A role of weeds 3:157 A 3:168 A; 6:357 F; 6:367 P; 6:371 P; 8:rab A aretic 1:16 A primate 6:346 A stream 6:370 P Economics and the environment 3:168 A Ecosystem 6:368 P exhibits 8:497 F Ecosystems 3:142 A; 4:205 A study of 2:98 A Education 1:14 A; 1:48 F about land pyramid 6:342 A attitudes toward 2:91 A broadening scope of 6:369 P environmental 3:168 A; 6:351 A; 6:357 F; 7:413 A; 7:422 A; 8:473 A nutritional 1:19 A goals of 1:13 E; 8:489 F in Soviet Union 6:366 P of pre-service teachers 2:86 A public 3:172 F sex 1:34 A undergraduate 6:376 P values in 5:277 A Educational alternative 6:355 L prerequisites for entomologists 4:426 A process 7:440 F program at Yosemite 6:351 A Effectiveness of antiseptics 2:102 A Elementary classroom activities 4:211 A Embryos, chick 8:498 F Emotionally handicapped 6:375 P Endangered species 6:357 F Energy in food production 7:402 A England 2:91 A Enrichment exercises 7:417 A Entomologists at work 4:246 A Environment 6:367 P Entomology 4:203 E; 4:204 A; 4:205 A; 4:208 A; 4:239 A; 4:242 A; 4:250 A for elementary teachers 4:211 A Environment, preservation of 3:142 A Environmental awareness 7:419 A contamination 4:239 A crisis 6:342 A education 2:112 F; 3:168 A; 6:357 F; 6:374 P; 7:402 A; 8:473 A; 8:497 F 8:rab A; 8:dpw F ethics 7:417 A gases 7:434 F health science 6:366 P institute 6:376 P modification 7:401 E problems 6:371 P Environmental Protection Agency 3:162 A Enzymes 1:52 F and genes 9:537 A Epistatic interaction 5:288 A Equipment construction of 9:554 F for bacteria bank 2:102 A for holding arthropods 4:211 A

for studying lake ecosystem 2:98 A

micrometer 2:114 F

photographic 2:88 A

Estuarine environment 7:413 A Ethical issues 7:436 F; 7:441 F in biology 3:148 A Ethics 1:49 F Ethology 6:372 P Evaluation 1:13 E; 1:14 A; 1:24 A; 1:40 A by students and teachers 3:179 F of arboretum project 9:553 F of BSCS materials 2:79 A of community-issues biology 8:469 A formative 6:351 A of contractual learning 8:481 A of environmental activities 7:422 A of field studies 2:98 A of independent study 2:112 F of individualized instruction 7:439 F of microbiology activities 2:102 A of mitosis model 2:105 A of project-oriented work 2:86 A of teaching 1:50 F of teaching model 7:405 A of teaching seminar 9:528 A of testing procedure 6:348 A Evidence, nature of 5:284 A Evolution 8:495 F cultural 5:277 A of insects 4:205 A Examinations 8:481 A Exchange teacher 2:91 A Exhibits, modular 8:497 F Exotic pests 8:486 F Experimental animals, insects as 4:250 A Experiments designed to fail 6:358 F in *Drosophila* genetics 5:288 A of nature 8:486 A Exploration of ecosystems 6:368 P Expressed needs 2:117 L

Faculty renewal 7:401 E Features in ABT 6:341 E in journal 5:275 E Fermentation experiment 3:175 F Field activities, ecology of weeds 3:157 A Field projects 2:112 F Field studies 6:357 P; 6:368 P; 6:369 P; 6:371 P; 6:375 P; in January term 5:297 F lake 2:98 A snow ecology 1:16 A Field trips 6:373 P; 8:501 F; 9:525 A Films on primates 6:346 A Finquel 8:548 F Fitness 3:142 A Fish, harvesting of 2:76 A Fisheries resources 3:168 A Fleming 1:52 F Flight of insects 4:250 A Floating net pen 2:76 A Flora, human 6:374 P Food for insects 4:211 A; 4:235 A production, energy in 7:402 A supply 6:342 A; 6: 355 L and nutrition 3:162 A Food value of insects 4:208 A Formal operational thought 7:407 A Formal operations 1:28 A Formation of recombinant DNA 3:144 A

Formative evaluation 6:351 A

Four-one-four program 5:297 F

Fossil energy use 7:402 A

Frogs, anesthetizing 8:546 F recycling of 6:374 P Functions of NABT 5:275 E; 6:341 E Future, teaching for the 2:75 E value education in 5:277 A expectations for human biology 6:130 P manager 4:242 A Futuristics 6:371 P Goal-oriented science 5:277 A Goal-setting as motivational device-9:jgc E Goals 1:13 E Government and Public Policy 3:168 A Graber, Karen W. 6:354 F Grade Consciousness 2:91 A Grading practices 3:179 F Graduate teaching assistants 1:24 A; 5:304 F Graduation requirements 3:179 F Gram staining 2:102 A Growth chamber 5:301 F Growth of insects 4:250 A Growth regulators to control insects 4:242 A "Guinea pigs," insects as 4:250 A Gene function 9:537 A Genetic control 6:376 P Genetic drift 8:550 F Genetic engineering 5:292 A; 9:533 A epistomology 1:28 A information 3:144 A Genetics 6:370 P; 7:417 A Habitats of insects 4:205 A Haeckel, Ernst 9:544 F Hand screen 2:98 A Hardy-Weinberg equilibrium 2:105 A Harmful effects of insecticides 4:239 A Health and Nutrition Examination Survey (HANES) 1:19 A Health care 7:417 A foods 3:162 A maintenance 3:148 A Hematology 6:373 P Herbarium techniques 1:40 A High School students, cognitive levels of 7:407 A History of discovery of gene function 9:537 A of museums 9:525 A Holandric genes 5:288 A Holding device for arthropods 8:500 F Homosexuality 2:116 L Honorary member 8:483 F Host-plant resistance of insects 4:242 A Howler monkey anatomy 3:150 A Human behavior 2:116 L Human behavior, control of 7:417 A Human biology 6:370 P; 6: 371 P Human element in environmental education 8:473 A Human experimentation 3:148 A; 7:441 F Human welfare, insects and 4:208 A Humidity regulation in growth chamber 5:301 E Hurd, Paul de Hart 8:483 F Hypotheses about Drosophila genetics 5:288 A Identification of insects 4:211 A

Impact of BSCS materials 2:79 A

of ethical issues 3:148 A

Implications

of Piagetian theory 1:28 A of Soviet education 6:366 P Import permits 8:486 F Improvements in teaching situation 5:257 E Independent assortment 2:105 A Independent study 2:112 F Indicators of environmental factors, insects as 4:250 A of pollution, insects as 4:208 A Individualized instruction 5:300 F; 7:439 F 9:546 F Individualized learning 6:348 A Indoor conservationists 7:419 A Informal professional accountability to taxpayers 3:172 F Information, use of 9:533 A Inner-city students 6:373 P Innovative curriculum, underuse of 2:79 A Inquiry 1:50 F Inquiry learning 7:422 A Insect control 4:203 E management 4:242 A net 2:98 A Insecticides 4:239 A Insects and human welfare 4:208 A success of 4:205 A In-service preparation 2:79 A teacher training 6:366 P Institute, Yosemite 6:351 A Instructional development 7:401 E materials, evaluation of 7:407 A objectives 5:300 F Instructor's role in independent study 2:112 F Integration of insect control systems 4:242 A Intelligence 1:28 A Interaction among species 8:469 A of populations 6:359 F with students 1:49 F Interdisciplinary orientation 2:94 A Interdisciplinary program 1:49 F; 5:279 F; 6:346 A; 6:367 P; 6:388 P; 7:440 F; International impact of BSCS 2:79 A Interrelationships of things on earth 3:142 A Intersession 6:346 A Introductory life science course 9:533 A Investigations 1:43 A; 6:358 F; 6:333 P; 6:376 P; 7:413 A ecological role of weeds 3:157 A in genetics 5:288 A on osmosis 3:174 F on plant growth 5:301 F on the nature of evidence 5:284 A respirometry 3:175 F snow ecology 1:16 A using Bryophyllum 5:281 A using insects 4:250 A

The index has three parts: subjects, titles, and authors. Alphabetizing is letter by letter (not word-by-word); for example, "Educational" would precede "Education theory."

Involvement of citizens in conservation 7:419 A Iron requirements 8:466 A Isolation of bacteria 2:102 A of human flora 6:374 P

January term 5:297 F; 6:346 A Judeo-Christian tradition 6:342 A

Kalanchoe daigremontiana 5:281 A Keller plan 9:546 F Killing jar 2:98 A

Laboratory activities 2:98 A; 6:376 P;

investigations 6:360 P on land use 6:374 P procedures 2:114 F; 6:373 P; 7:413 A; 7:405 A; 7:433 F; 7:434 F; 8:498 F; 9:527 A; 9:547 F; 9:550 F; 9:553 F in Drosophila genetics 5:288 A

osmosis 3:174 F Laboratory teaching seminar 9:528 A techniques, herbarium 1:40 A testing 6:348 A use 7:431 F of insects 4:208 A

Lactuca sativa 3:174 F Lake ecosystem 2:98 A Land pyramid 6:342 A Land usage 6:322 A Laws of nature 6:342 A Learner 1:13 E Learning

activities 5:300 F contracts 8:gfa A disability 6:375 P kits, development of 1:43 A modules 9:546 F resource center 2:86 A theory 6:372 P; 7:422 A; 8:477 A

Lecture methods 5:304 F Lectures 9:533 A Lettuce seeds 3:174 F Levels of moral development 7:436 F Library use 6:357 F; 7:431 F Life in England 2:91 A Life processes 2:108 A Life style 1:13 E Life-support systems 3:142 A Light timer, modification of 5:298 F Literacy

in science 2:110 F scientific 6:366 P Living conditions for insects 4:211 A Locomotion, anatomical basis for 3:150 A Longevity and diet 1:19 A Lysozyme 1:52 F

Man and the environment 3:168 A Man, a course of study (MACOS) 2:117 L Man in nature 6:342 A Man's relationship with insects 4:205 A Mariculture 2:76 A Masters, Patricia A. 6:354 A Medical entomology 4:246 A Meiosis I and II 2:105 A

demonstration of 2:105 A Membership in NABT 1:48 F Mendelian ratios 2:105 A Metaphase 2:105 A Microbiology 2:102 A; 6:374 P Micrometer 2:114 F Microteaching 1:50 F Mineral deficiencies 1:19 A Mineral nutrition 5:281 A Minicourses 6:388 P Minority students 6:373 P Mississippi River 6:372 P Mistake of behavioral objectives 8:489 A Mitochondrial membrane 6:376 P Mitosis

demonstration of 2:105 A poem about 6:365 F Mobility of insects 4:205 A Model

for mitosis and meiosis 2:105 A for teaching investigation 6:376 P for teaching osmosis-diffusion 7:405 A stream ecology 6:370 P of three-dimensional cell 9:555 F of organs 6:360 F of population growth 6:369 P Modular materials 6:373 P Modules 1:43 A Molting of insects 4:250 A

Monistic philosophy 9:544 F Monkey business 6:346 A Moral development 7:436 F Moratorium on recombinant DNA 3:144 A Motion, range of 3:150 A Motivation, improving student 9:523 E

Mountain ecology 6:367 P Multisensory inquiry 6:388 P Muscle

distribution 3:150 A skeletal 6:370 P Museums 8:497 F Mythical whys for required courses 3:179 F

NABT function of 5:275 E; 6:341 E membership 1:48 F National Marine Fisheries Service 2:76 A Natural selection 8:495 F Naturalists 7:419 A Nature overwhelmed 6:342 A Need to control 8:473 A Night Before Crisis (poem) 9:542 F Noncyclic photosynthesis 3:177 F Nonmajors in biology 6:368 P Nonpassive education 2:86 A Normative science 9:533 A Notes from ABT 6:354 F

NSF funding 2:117 L Nucleic acids 8:466 A Nuclear annihilation 6:342 A Nutrition 6:355 L

and food supply 3:162 A education 1:19 A saltwater 2:76 A

Objectives

affective 9:532 A analysis of 1:50 F of instruction 3:179 F of teaching seminar 9:528 A Observation of natural phenomena Obvious, beware of 8:566 A Ocular micrometer 2:144 F Open-ended experiments 5:288 A Opportunities in entomology 4:246 A Organelles of the cell 2:108 A Organic foods 3:162 A Organs, study of 6:360 F Orientation centers in museums 9:525 A Original research materials, discussion of

Ornithology 6:355 L Osmosis 3:174 F; 7:405 A Outdoor recreation 3:168 A Outstanding Biology Teacher of America (OBTA) 7:426 A Overeating 1:19 A Overnight activities 7:422 A Overpopulation 6:342 A

Paradox of human existence 8:465 E Parasitic insects 4:208 A
Park Use 6:351 A Parks, city 6:376 P Parochialism of entomologists 4:204 A Participants in extracurricular programs 6:369 P Participation as motivational device 9:523 E Partnership of science and education 2:110 F Pea, anatomy of 2:113 F Penicillin 1:52 F

Penicillin 1:52 F Persistence of insects through time 4:205 A Personal development 7:401 E

Personalized instruction 5:304 F; 9:546 F Pest control industry 4:246 A Pest management 4:239 A; 4:242 A

Pest remedies 4:242 A Pesticides 6:355 L fight against 3:162 A
Pheromones 4:239 A: 4:250 A
Photography 2:88 A
Photomicrographs 6:348 A

Photoperiodism 5:281 A Photosynthesis 3:177 F game 8:528 A

Physical facilities 9:545 F Phytoplankton 7:413 A Piaget, philosophy of 1:28 A Piagetian theory 7:407 A Plankton net 2:98 A

Planning a photography project 2:88 A Plant

chamber 9:554 F collections 1:40 A hormones 5:281 A inspection 8:486 F protein 7:402 A

Plants, used to humidify 5:301 F Plastic bags, use with which embryos 8:498 A

Policy-making, public issues pertaining to recombinant DNA 3:144 A Political

leaders 3:142 A institutions 5:277 A

Pollution 9:542 F indicators, insects as 4:208 A Population and food production 7:402 A and urbanization 3:168 A

and utballization 5.186 A control 5:292 A; 6:342 A; 7:471 A dynamics 6:370 P fluctuation of 6:359 F growth 6:369 P; 6:372 P; 9:542 F

The index has three parts: subjects, titles, and authors. Alphabetizing is letter by letter (not word-by-word); for example, "Educational" would pre-cede "Education theory."

Portable exhibits 9:528 A Prairie kit 1:43 A reconstruction 6:375 P Predators, in aquaculture 2:76 A Preparation for field trips 8:501 F Pre-service education 2:79 A; 2:86 A teacher training 6:368 P teachers, photography for 2:88 A Preserving our wildlife heritage 7:419 A Preserving the environment 3:142 A Preventive measures to control insects 4:242 A Primate behavior 6:346 A Primatology 6:346 A Probability 2:105 A Procedures for lake study 2:98 A for population simulation 6:359 F Process of science 8:477 A Proctors 9:546 F Professional careers 1:49 F development 7:401 E entomologists 4:203 E standards of entomologists 4:246 A Professionalism 3:172 F Project method 5:304 F Project-oriented work 2:86 A Propulsion 3:150 A Prosperity, impending environmentalists 3-162 A PSI 9:546 F Public awareness of insecticide problems 4:239 A Public response to science 5:277 A Purposes

Quality of life 3:162 A; 5:292 A Questioning style of textbook 8:472 A Questionnaire 5:275 E results 6:341 E

of insect research 4:250 A

of education 3:179 F

Radiolarians 9:544 F Real world, classroom in the 2:94 A Receptor organs of insects 4:250 A Recombinant DNA 3:144 A Recommendations for environmental education 8:473 A Reports, preparation of 2:88 A Reproduction 1:34 A Reproductive potential of insects 4:205 A Required courses 3:179 F Research on cognitive abilities 7:407 A on land pyramid 6:342 A papers, used to study scientific methods 5:302 F studies on curriculum innovation 2:79 A using A-T as a tool 6:371 P winter 1:16 A Respirometer 3:175 F Respondents to survey 6:341 E Responsibilities of teachers 3:172 F Responsibility of students 9:546 F Resources

for projects 2:86 A

natural 3:168 A

insects as wasted 4:204 A

The index has three parts: subjects, titles, and authors. Alphabetizing is letter by letter (not word-by-word); for example, "Educational" would precede "Education theory."

Review questions 8:481 A RNA, role in gene function 9:537 A Road kills collection of bird 1:53 L skeletons from 7:433 F Role-playing simulation 3:177 F

Sacramento-San Joaquin Delta 7:413 A

Safety on field trips 8:501 F Salmon 2:76 A Saltwater fishing 2:76 A Salvage permits for road kills 1:53 L School grounds 9:553 F Science and cultural values 5:277 A and education 2:110 F and society 7:417 A applied 6:368 P centers 9:525 A education 6:371 P education, rationale for 5:277 A fair exhibits 8:486 F in society 8:494 F literacy 6:366 P role in environmental crisis 6:342 A strength of 8:465 E use of 7:441 F Scientific base for education 2:110 F enterprise 5:302 F evidence 3:142 A

issues 8:469 A methods 6:358 F; 8:465 E; 9:533 A observation 8:466 A progress 9:536 A Secchi disk 2:98 A Segregation of chromosomes 2:105 A Self-evaluation 1:13 E; 3:179 F as motivational device 9:523 E staff 6:351 A Self-examination 1:41 A Self-paced instruction 9:546 F Seminar in laboratory teaching 9:528 A Seminars 1:24 A Seventeenth century text 5:284 A Sex education 1:34 A Sex Information and Education Council of the United States (SIECUS) 1:34 A

Sex-limited expression 5:288 A
Sex-related topics, analysis of 1:34 A
Silent Spring 3:162 A
Simulated conference 5:292 A
Simulation
career-oriented 6:374 P
computer 6:370 P; 6:376 P
of beating heart 7:436 F
of matings 9:551 F
of photosynthesis 9:528 A
of population fluctuation 6:359 F
Size of bacteria 2:102 A
Skeletons
collecting 7:433 F
Slides, use of for testing 6:348 A

Slides, use of for testing 6:348 A Slime molds 6:369 P Snow ecology 1:16 A Social consciousness in the classroom 2:94 A Social implications 8:494 F of biology 9:528 A of science 7:417 A Social issues 9:533 A Social responsibility 2:94 A Societal norms, science subverted by 5:277 A Societal problems 2:86 A Sociobiology 2:116 L Soil resources 3:168 A samples 8:486 F Space utilization 7:431 F Specimens, plant identification 1:40 A Spectrophotometer assay 6:373 P self-assessment 6:351 A utilization 7:431 F Student achievements 6:370 P

apathy 5:300 F assistants 7:422 A attitudes toward animals 8:491 F behavior 6:374 P evaluation 1:24 A goals 3:179 F involvement 6:351 A knowledge of sex-related topics 1:34 A motivation 6:346 A; 9:523 E participation 3:177 F preparation of bioethics unit 5:292 A response to contracted learning 8:481 A success 6:368 P teaching assistants 7:413 A how they learn 9:543 F involvement 1:13 E Success as motivational device 9:523 E Support surfaces, arrangement of 3:150 A Survey results 6:341 E Survival 3:142 A mechanisms of insects 4:211 A winter 1:16 A Swimming 3:150 A

Symmetry and balance 3:150 A "Talking organs" 6:360 F Taxonomy 9:544 F Teacher belief system of 6:369 P chaperones 6:351 A evaluation of herbarium cards 1:40 A preparation 6:372 P responsibilities of 8:481 A role of 8:469 A traini 1:19 A; 1:24 A; 1:49 F Teach tered classroom 5:305 F Teach 1:14 A; 1:34 A; 1:48 F elementary 4:211 A pre-service 2:86 A role in policy making 3:144 A Teachers' responsibilities 3:172 F Teaching 2:75 E about values 1:49 F as an art 1:14 A assistants 1:24 A entomology 4:246 A ethical issues 3:148 A methods 1:13 E; 1:14 A; 1:24 A; 2:79 A; 5:300 F; 5:304 F; 5:305 F; 6:358 F; 6:360 F; 6:367 P; 6:371 P; 6:372 P; 7:405 A; 7:407 A; 7:413 A;

7:417 A; 7:422 A; 7:436 F; 7:439 F; 8:469 A; 8:481 A; 9:528 A; 9:533 A; 9:543 F; 9:546 F for open-ended experiments 5:288 A simulation 5:292 A required courses 3:179 F seminar 9:528 A situations, improvement of 6:341 E vehicle, insects as 4:204 A Team teaching 7:440 F Technology 8:473 A effects of 5:277 A in museums 9:525 A Teleostean fish 6:376 P Telophase 2:105 A Terrestrial arthropods 4:211 A Test on Understanding Science (TOUS) 5:302 F Test results, posting of 6:374 P

laboratory 6:348 A
Textbook
controversy 8:495 F
coverage of sex-related topics 1:34 A
evaluation 7:407 A
sales 2:79 A
selection 8:477 A
Three-dimensional cell 9:555 F

Thresholds of insect control systems
4:242 A
Tidal currents 2:76 A
Timer, light 5:298 F

Topics, selection of 8:469 A
Toxicity of insecticides 4:239 A
TQSAI (Textbook Questioning Strategies
Assessment Instrument) 8:477 A
Training program for teaching assistants
1:24 A

Transparent dissecting tray 5:299 F Trans-Alaska pipeline 6:375 P Travel arrangements for field work 5:297 F

Tree resources 3:168 A Triage 5:292 A Tropism 5:281 A

Testing 6:370 P

Ubiquity of microorganisms 2:102 A Undergraduate teaching assistants 9:528 A Understanding of science 5:302 F Urban and regional planning 3:168 A Urbanization 6:342 A Utilization of BSCS materials 2:79 A

Values 1:14 A clarification 5:292 A effect of in science 5:277 E judgments 6:342 A program 1:49 F questions 9:533 A Valuing 6:367 P Vegetative plantlets 5:281 A Velocity-of-flow equipment 2:98 A Venereal disease 1:34 A Vertebrate skeletons 9:lms A Veterinary entomology 4:246 A Vibrio anguillarum 2:76 A Videotaping 1:24 A Viewpoints 6:355 L Visual media 6:371 P Vitamin deficiencies 1:19 A Vulnerability 8:465 E

Water for insects 4:211 A quality 6:372 P resources 3:168 A
sampling 7:413 A
sampling bottle 2:98 A
Wildlife
heritage 7:419 A
resources 3:168 A
Winter hiking 7:422 A
Wood ducks, behavior of 6:388 P
Worcester Polytechnic Institute 9:533 A
Weeds 3:157 A
Wesleyan University 8:494 F
Whales 8:469 A
Wilderness 6:368 P; 6:369 P
World Health Organization 3:162 A
World population 5:292 A

Year-end 5:275 E Yosemite Institute 6:351 A Zoo, as classroom 6:374 P Zooplankton 7:413 A

REVIEWS

 Authors and editors of the books (not the reviewers) are mentioned in parentheses preceding the issue-and-page reference.

Audiovisuals: Animals and their world (McGraw-Hill Films) 6:385; Biology enrichment filmstrip/cassette program (Silver Burdett Co) 4:259; Bio-stereo: biology in three dimensions (Biological Sciences Curriculum Study) 5:317; Communities of living things (Arthur Barr Productions, Inc.) 2:125; Cottonwood (West Wind Productions) 3:189; Eat, drink and be wary (Churchill Films) 4:260; Ecology; wantedalive! (Aims Instructional Media Services) 2:126; Evolution of life (Visual Publications) 8:513; Exploring the spectrum (International Film Bureau) 3:190; Exploring your environmental choices (Metropolitan Life, Health and Welfare Division) 5:318; Galapagos: laboratory for evolution (Harper and Row, Publishers) 9:563; Land use andmisuse (Learning Corporation of America) 6:384; Man: the incredible machine (National Geographic Society) 5:319; Measuring the brain gain (Doubleday Multimedia) 8:512; Metric measurement (United Learning) 6:385; One species among many (Centron Educational Films) 2:125; Plants: source of life series Multimedia) 5:319; (Doubleday Plant succession on lava flows Imperial Educational Resources) 8:513; Plant world (McGraw-Hill Films) 6:386; Ratopolis (National Film Board of Canada) 6:387; The real world of insects (Learning Corporation of America) 8:514; Sharing the land (Cinema Associates Productions) 3:

190; Wildlife: An American heritage (West Wind Productions, Inc.) 2:126

Behavior: Biorhythm: a personal science (Gittelson) 4:254; Crowding and behavior (Freedman) 2:120; How insects communicate (Patent) 7:443; The hungry fly (Dethier) 9:557 Languages of the animal world (Prince) 8:505; Parent birds and their young (Skutch) 8:505; Social hierarchy and dominance (Schein) 3:183; Sociobiology: the new synthesis (Wilson) 2:119; The vampire bat: a field study in behavior and ecology (Turner) 2:119

Botany: Flowering plants: evolution above the species level (Stebbins) 1: 55; Limnological botany (Vol. III) (Hutchinson) 8:506; Photosynthesis (Tribe, Eraut, and Snook) 3:184; Plant anatomy (Stevenson and Mertens) 3:183; Plants, an introduction to modern botany (Greulach and Adams) 6:377; A scanning electron microscope study of green plants (Lott) 8:505; Wild plants in the city (Page and Weaver) 1:55

Cell and molecular biology: Basic chemistry: a programmed presentation (Brooks and Norton) 8:506; Beginning biochemistry (Berman) 7:451; DNA: the key to life (Parker, Reynolds, and Reynolds) 3:184; Electron microscopy and cell structure (Tribe, Eraut, and Snook) 5:315; Hunting with the microscope (Johnson and Bleifeld) rev. ed. 4:258; Light microscopy (Tribe, Eraut, and Snook) 5: 315; Modern cell biology (McElroy and Swanson) 8:506; Outlines of biochemistry, 4th ed. (Conn and Stumpf) 8:506; Through the molecular maze: a helpful guide to chemistry for begining life science students (Breen, Rodella, and Basmajian) 3:184

Ecology and environmental biology: Air: an intermediate science unit (Newton and Geis) 6:380; American sportsmen and the origins of conservation (Reiger) 5:315; The California land: planning for the people (California Land Use Task Force) 7:444: A closer look at deserts (Pitt and Cook) 4:258; Comfrey: food, fodder and remedy (Hills) 9:558; The earth manual (Margolin) 2:121; Ecological principles (Tribe, Eraut, and Snook) 3:185; Ecology: the link between the natural and social sciences (Odum) 2nd ed. 2:120; The ecology of man: an ecosystem approach, 2nd ed. (Smith, ed.) 8:507; The economy of nature (Ricklefs) 7:444; Energy and environment: the four energy crises (Miller) 6:378; Energy, earth and

The Department of Biological Sciences at Northern Arizona University has available for the academic year 1977-1978, half-time Instructorships for persons who are admissable to the University, the Graduate College and the PhD program of the Department and who expect to pursue the Doctoral degree. Prior full-time teaching experience at the Secondary or College level is pre-requisite for consideration for appointment. Instructors who are appointed may expect to be reappointed two times provided performance is satisfactory. For further information write to:

Dr. James R. Wick, Chairman

Department of Biological Sciences Box 5640 Northern Arizona University Flagstaff, AZ 86011

Northern Arizona University is an Equal Opportunity Employer

everyone (Gabel) 6:378; Environmental education: a guide to information sources (Stapp and Liston) 6: 377; Environmental physiology (Phillips, ed.) 1:60; Fifty spirit master activities in environmental science (Newton) 7:446; Investigating your environment (Biological Sciences Curriculum Study) 7:443; Life in and around freshwater wetlands (Ursin) 2:120; Man and the environment: an introduction to human ecology and evolution (Boughey) 1:56; Physiological adaptation to the environment (Vernberg, ed.) 1:59; River ecology (Whitton, ed.) 6:378; Seasons of the salt marsh (Gates) 3:184; Teaching environmental education (Hungerford and Peyton) 9:553; Terrestrial environments (Cloudsley-Thompson) 4:255; We almost lost Detroit (Fuller) 3:189; What makes education environmental? (McInnis and Albrecht, eds.) 3:185; The world of endangered wildlife (National Wildlife Federation) 2:124

Education and professional concerns: Confluent education in science (Romey) 7:445; The enduring effects of education (Hyman, Wright, and Reed) 4:256; Environmental careers (Hahn and Hahn) 8:508; Improving reading in science (Thelon) 9:558; An introduction to the profession of medical technology (Williams and Lindberg) 2nd ed. 2:121; The live classroom: innovation through confluent education and Gestalt (Brown, ed.) 4:256; Media review digest (Rigg et al., eds.) 1:61; Nontraditional college routes to careers (Splaver) 1:56; Opportunities in environmental careers (Fanning) 2:121: Opportunities in forestry careers (Demmon) 1:56; Teaching metric awareness (Kurtz) 6:381; Teaching the future (Kauffman) 2nd ed. 7:444; T.E.T.: Teacher effectiveness training (Gordon) 1:56

Evolution: Evolution of desert biota (Goodall, ed.) 9:559; How life began: creation versus evolution (Gallant) 3:186; Living trophies (Batten) 9:562; Surtsey: evolution of life on a volcanic island (Fridriksson) 3:186

General biology: Action biology (Weinberg and Stolze) 1:57; Bio graffiti: a natural selection (Burns) 6:379; Biology (Goldsby) 7:446; Biology: an inquiry into the nature of life(Weinberg) 1:57; Biology: and its relation

to mankind (Winchester) 1:57; Biology Bingo (Newton) 7:445; Biology laboratory manual (Winchester) 3: 187; Biology puzzles and puzzlers (O'Neill) 7:446; Biology: you and vour environment (Cunningham) 8:507; Elements of biology, (Vol. I) (Nair and Kamath) 1:57; Experiments in life science: a laboratory guide (Kaplan) 2nd ed. 8:508; Inquiries into life: interdependence of life; diversity of life (Lang, Palfrey and Van Nieuwenhove) 6:379; Inquiry into life (Mader) 8:509; The laboratory experience: a principles of biology manual (Chiscon, Carlin, Chiscon, Shippee, and Vanable) 8:508; Patterns in biology (Harrison) 1:57; Problem solving in biology (Kaplan) 7:447; The search for life (Aylesworth) 4:257

Genetics: An approach to problem solving in genetics (Myers, Gilmore, and Englert) 8:510; Conceptual foundations of genetics (Corwin and Jenkins) 9:560; An introduction to genetic analysis (Suzuki and Griffiths) 9:559; An introduction to modern genetics (Patt and Patt) 3:187;

Health: Alcoholism (Silverstein) 7: 448; Alcohol—proof of what? (Lee) 7:449; First aid without panic (Hartley) 7:450; Food: where nutrition, politics and culture meet (Katz and Goodwin) 7:449; Human biology in health and in disease (Burke) 3:188; Human reproduction: biology and social change (Swanson) 1:58; Human sexuality (Goldstein) 7:448; It's going to sting me! (Rood) 8:511; Your body and how it works: the ear (Hubbard Scientific Company) 5: 318

History and philosophy: Biological awareness: statements for self-discovery (Edington and Cunningham) 5:316; Great scientists speak again (Eakin) 3:188; History of general physiology, 600 B.C. to A.D. 1900 (Vols. 1 and 2) (Hall) 6:379

Physiology: Anatomy and physiology, 2nd ed. (Evans) 9:560; Avian physiology (P.D. Sturkie, ed.) 9:561; Comparative physiology of animals: an environmental approach (Hill) 9:561; Experiments in physiology (Tharp) 3rd ed. 8:511; Laboratory experiments in physiology (Grinnell and Barber) 6:380; The life of mammals: their anatomy and physiology (Young) 9:561; A manual of anatomy and physiology (Donnesberger, Lesak, and Timmons) 7:450; Principles of anatomy and physiology (Tortora and Anagnostakos) 1:58; Review of gross anatomy (Pansky and House) 1:61

Related fields: A closer look (Godfrey) 6:377; American astronauts and spacecraft (Knight, ed.) 5:316; Concise color encyclopedia (Kerrod) 2:123; Foundations of biophysics (Stanford) 2:122; Introduction to mathematical biology (Rubinow) 7:450; Physics for biologists (Duncan) 7:451; What people eat: an introduction to chemistry and food sciences (Raw, Bromley, Pariser, and Vournakis) 6:382

Social and ethical issues: Abortion and the sanctity of human life: a philosophical view (Brody) 6:383; Discussing death: a guide to death education (Mills, Reisler, Robinson, and Vermilye) 6:382; Impact: science on society (Wolke, ed.) 1:60

Zoology: Among the elephants (Douglas-Hamilton and Douglas-Hamilton) 1:55; Aquarium fishes in color (Madsen) 1:60; A closer look at dogs (Pitt and Cook) 5:317; Dangerous sea creatures (Helm) 9:562; Fishes of the world (Wheeler) 2:124; Fundamentals of ornithology (Van Tyne and Berger) 6:383; The international butterfly book (Smart) 6:384; Kangaroos, opossums, and other marsupials (Jenkins) 5:317; Keeping live corals and invertebrates (Straughan) 5:316; Vertebrates: a laboratory text (Wessels and Center, eds.) 2nd ed.

A-Articles

An American exchange teacher in England, by James V. Bradley 2:91

An analogue for the cell, by Joseph A. Cavese 2:108

An analysis of sex-related topics in high school biology, by Gyann Kent and Ronald D. Simpson 1:34

The anatomical basis of locomotion, by Theodore I. Grand 3:150

Theodore I. Grand 3:150

Another wasted resource, by William J.

Fischang 4:204 Aquaculture: its promise and problems, by

Jon M. Lindbergh 2:76 Are we fit to survive?, by Tom L. McCall

Beware the "Obvious," by Eugene D. Wein-

berg and Dean Fraser 8:466 A biology lab final on 35-mm slides, by Jeff

Kaye 6:348
BIOS i Kits: modular material designed to

assist students in investigation, by Darrel L. Murray 1:43

A British teacher in America, by Alan Jones 2:93

Bryophyllum: a versatile plant for the laboratory, by E. Thomas Hibbs and Nanci G. Yokum 5:281

Chemical insecticides, by Frederick W. Plapp 4:239

Cognitive development and processes: review of the philosophy of Jean Piaget, by Elizabeth J. Mallon 1:28

College, anyone? by Fletcher G. Watson 9:fgw

The college teacher and social responsibility, by Edward J. Kormondy 2:94

Community issues biology: a new kind of action-learning, by Arthur P. Cooley 8:469

Concrete and forman operational thought: implications for introductory college biology, by Suzanne B. Haley and Ronald G. Good 7:407

Construction and use of equipment to study a lake ecosystem, by Sister Kathryn Polas, S.C. 2:98

Contractual learning: a viable approach to education in the biological sciences, by George T. Asteriadis 8:481

A criterion for biology textbook selection, by William H. Leonard and Lawrence F. Lowery 8:477

Custom laboratory equipment from acrylics, by Robert W. Olsen 9:rlo

Demonstrating mitosis and meiosis, by J.A. Hawk and L.V. Crowder 2:105

Discovering the nature of evidence, by Menahem Finegold 5:284

Effective training for teaching assistants, by

Robert D. Allen 1:24

Energy in Food Production, by David Pimentel, Nancy R. Goodman and Michael N. Burgess 7:402

Entomologists at work, by Edward H. Smith 4:246

Environmental education by correspondence, by Thelma Marie Wurzelbacher 3:168

An exploratory study of the impact of BSCS secondary school curriculum materials, by Paul DeHart Hurd 2:79

Formative evaluation at the Yosemite Institute, by Stanley L. Cummings 6:351

A Functional Model for Teaching Osmosis-Diffusion to Biology students, by Richard W. Olsen and Douglas E. Petry 7:405

High school botany course emphasizes herbarium techniques, by George M. Dreitlein 1:40

A high school snow ecology unit, by R.E. Phillips and C.A. Watson 1:16

How to be a successful OBTA candidate, by Alice R. Squires 7:426

How to use biological abstracts, by Roger E. Quackenbush 7:431

The importance of biology teaching for secondary school pupils, by Paul Sears 1:14

The infusion of environmental activities into a secondary biology curriculum, by Helen M. Foster 7:422

Innovative approaches of science centers, by Victor J. Danilov 9:524

Insect abundance, by Paul O. Ritcher 4:235
Insects: a success story, by V. J. Tipton 4:205

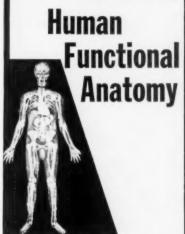
Insects and human welfare, by Thomas E. Skelton 4:208

Insect diversity and systematics, by John D. 4.231

Integrated pest management, by D. R. Minnick 4:242

Microbiology laboratories and the use of a bacteria bank, by Laurence E. Slavin

The Johns Hopkins Atlas of



illustrated by Leon Schlossberg edited by George D. Zuidema, M.D.

With 148 color illustrations showing all systems and organs of the human body, this totally new atlas will be an indispensable reference for students of anatomy and physiology and all others who need a capsule guide to human anatomy.

Original in concept as well as content, the Atlas is the product of The Johns Hopkins Medical Institutions. The full-color plates by Leon Schlossberg, whose work as a medical illustrator has won world-wide recognition, are complemented by descriptive text written by leading members of the School of Medicine faculty.

\$16.50 hardcover, \$6.95 paperback.

The atlas illustrations are available as a set of forty color slides, either labeled or unlabeled, for classroom use.

published by The Johns Hopkins University Press

The Johns Hopkil Baltimore, Maryla I wish to conside	pon and mail it to: ns University Press, and 21218. r The Johns Hopkins functional Anatomy
Level	
Enrollment	
Name	
Street	
City	

Investigating the ecological role of weeds, by Paul G. Jantzen 3:157

Laboratory teaching seminar for undergraduates: a response to overcrowding, by Harlo H. Hadow 9.528

Man in nature overwhelmed: the American land pyramid in crisis, by Patricia Bytnar Perfetti 6:342

The need for nutrition education, by David R. Stronck 1:19

Nutrition and the food supply: controversies and prospects, by Thomas H. Jukes 3:162 An open-ended drosophila genetics experiment, by Thomas R. Mertens 5:288

Our need to control: implications for environmental education, by Richard A. Baer, Jr. 8:473

Photography for the preservice biology teacher, by Sigurd Olsen and Ingrith D. Olsen 2:88

Preserving our wildlife heritage: the concerned citizen is essential, by Thomas L. Kimball 7:419

Project-oriented work for preservice biology teachers, by Ingrith D. Olsen 2:86

The quality of life for the world's population: a unit on bioethics, by Arthur Bloom and Phyllis Constan 5:292

Raising bioethical consciousness in an introductory life sciences course, by Betty B. Hoskins 9:533

Rearing insects in the classroom, by Richard J. Sauer 4:216

Recombinant DNA molecules: the challenge of a revolutionary technique, by Richard Roblin 3:144

Sampling the Sacramento-San Joaquin Delta Waters, by Richard V. Thall 7:413

Science and cultural values, by David H. Ost 5:277

Science and society: enrichment exercises in biology, by James H. Meyer 7:417

A short history of the discovery of gene function, by Charles L. Vigue 9:537

Six-legged guinea pigs, by Ross H. Arnett, Jr. 4:250

Teaching ethical issues in biology, by Sheldon F. Gottileb 3:148

Terrestrial arthropods in the elementary classroom, by Alice Gray 4:211

The tools of the entomologist, by John G. Stoffolano, Jr. 4:222

Try a little monkey business, by Sister M. Olivia Reginella 6:346

Editorials

Commencement, or year-end close out? by Joan G. Creager 5:275 Survey res8lts: a preliminary report, by Joan

G. Creager 6:341 Goals are for achieving, by Joan G. Creager

1:13

Improving student motivation, by Joan G. Creager 9:523 In defense of diversity, by James L. Mariner

3:141 Professional development, by David H. Ost

7:401 Teaching for the future, by Joan G. Creager 2:75

UNDERSEA ENVIRONMENTAL FILMS

16 mm, color and optical sound

CLOUD OVER THE CORAL REEF

one of the most visually striking efforts of documenting the decline and fall of an ecosystem that students are likely to experience"—The Science Teacher. 27 min. Price \$350

THE POISONED SEA

Shows the effects of sewage pollution in coastal waters. "Well suited for an introduction to water pollution sewage treatment . . . oceanography, ecology, or conservation."-The Sc 27 min. Price \$350 ence Teacher.

Purchase, rental or preview from

MOONLIGHT PRODUCTIONS/Dr. Lee Tepley 2650 California Street, Dept. BT

Mountain View, California 94040

Vulnerability-the strength of science, by Garrett Hardin 8:465

Why entomology? by Joan G. Creager

The index has three parts: subjects, titles, and authors. Alphabetizing is letter by letter (not word-by-word); for example, "Educational" would precede "Education theory."

Features

Akron arboretum, by Robert H. Saxer 9:rls Anatomy of a green pea, by Ralph Postiglione 2:113

Anesthesia of frogs with Finquel, by Robert J. Kozinski 9:550

A new perspective in biology teaching, by Willis H. Hertig, Jr. 9:543

Another approach to biology teaching, by Audrey Grissom 5:300

Apparatus to test environmental cases, by Nancy Taylor, T. Daniel Kimbrough, and Gerald C. Llewellyn 7:434

Avoiding the behavioral objectives mistake, by Howard J. Stein 8:489

The cell, by Conrad Weiler 6:365

Changes in editorial staff, by Joan G. Creager

Charles Drew, by Glenn Ligon 5:296 Collecting skeletons from road kills, by L. M. Lutton 7:433

College of Science in Society, by Jeffrey J. W. Baker 8:494

Development of chick embryos in plastic bags, by Susan R. Frazier 8:498

Do students insist on a teacher-centered classroom? by Joseph K. Allamong 5:305 Down with required courses! by Joan G. Creager 3:179

Environmental education through independent study, by Christine L. Case 2:112

Even one can hurt, by Elizabeth D. Ring 8-486

An experiment designed to fail, by Robert G. VanBuskirk 6:358 Field trips to the beach: safety first, by

William D. Arbus 8:501 Genes can drift: a model of genetic drift, by

Dorothy E. Western 9:551

Good, better, and best ways to teach, by Marjorie P. Behringer 5:304

Ernst Haeckel: a biographical sketch, by George D. Potts 9:544

Help! marine science educators association needed, by Richard M. Schlenker 9:494 A holding device for arthropods: construc-

tion and use, by Ronald D. Hill 8:500 Hurd elected honorary member of NABT, by Marjorie Behringer 8:483

Implementation of PSI at the secondary level: the time is now, by Paul Protopapas 9:546

Increasing student understanding of the scientific enterprise, by Howard B. Baumel and J. Joel Berger 5:302

Inexpensive modification of a light timer, by R. Douglas Lyng and Don r. Taves 5:298 Inexpensive ocular micrometers, by Stanley D. Whelchel 2:114

Integrating basic skills into environmental education, by James Levin 6:357

"Invitations to inquiry" and teacher training, by Pinchas Tamir 1:50

Jacob Bronowski, by A. Morgan Mercado 5:296

January term, by Frank Norton and Marjorie White 5:297 A justification of human experimentation,

by Sheldon f. Gottlieb 7:441 Lysozyme, penicillin, and chance discovery,

by Howard B. Baumel 1:52 Living within a tighter budget, by Gregory

J. Meissner 7:431 Meeting individual differences through as-

signment options, by Kenneth L. Gardner 7:439

Mitosis, by Laura Liberman 6:365

A model for a three-dimensional cell, by Christine Eitelbach 9:555

Moral development and its implications for biology teaching, by Charles R. Barman, John P. Guckin, and John J. Rusch 7:436

A museum approach to environmental education, by David P. Wallesz 8:497 N.A.B.T.: January 1976, by Haven Kolb

1:48

A new feature for ABT, by Lotte Geller 5:295

A new idea for a dissecting tray, by Arthur Branham 5:299

New values program at Cornell University, by Richard A. Baer, Jr., Carl F. Brandt, and Alice McDowell Pempel 1:49

On being an informed professional, by Jack L. Carter 3:172

Organ alley: pathway of learning in a biology classroom, by Michael F. Fleming 6:360 Science and education: a shaky partnership,

by Thomas J. Cleaver 2:110 A simple semi-quantitative respirometer for student use, by L. James McElroy 3:175

Simulating population fluctuations, by Russell H. Yeany, Jr. 6:359

Student attitudes towards animals, by Michael A. J. Collins 8:491

Teaching photosynthesis through student participation, by Dean A. Adkins 3:177

A third position in the textbook controversy, by Norman Macbeth 8:495

Night before crisis, by Jane Heinze 9:542 Using lettuce seeds to demonstrate osmosis, by Henry L. Speer 3:174

Using plants to regulate growth chamber humidity, by James Standquist 5:301

What and how-interdisciplinary, by Jerry W. Maurer 7:440

Letters

Comments, by Franklin Fitz 1:53 Comments, by Paul R. Gastonguay 2:116 Comments, by William V. Mayer 2:118 Educational alternative, by Marion C. McIntosh 6:355

Federal act limits collection of bird roadkills, by George W. Harrison 1:53 Mixed feelings, by Jeffrey J. W. Baker

NSF funding: who is accountable? by Elmer R. Seevers 2:117

Viewpoints, by J. Gordon Edwards 6:355 Viewpoints, by Howard W. Hintz 6:355 Viewpoints, by Steve Stocking 6:355

Abstracts

An approach to ecosystem exploration, by Robert H. Cutting 6:368 Applied science career program, by Gloria

Felchner 6:368

Audio-tutorial instruction in the doctor of arts program, by Donald P. Streubel 6.375

Audio-tutorial instruction as a research tool, by Jane B. Kahle 6:371

Bio-citizens responsibility, by Sherman C. Nystrom 6:373

Biology interdisciplinary minicourses and the school team, by Stephen J. Zipko 6:388

Biology of man: a nontraditional approach to college teaching, by J. L. Koevenig and T. O. Morgan 6:371

Broadening the scope of biology education, by Joyce G. Greene 6:369

Career-oriented simulations in microbiology,

by Virgil A. Sestini 6:374 Cellular slime molds-population growth models, by Robert A. Hirschy 6:369

Chemistry before biology: a case in point, by Felix A. Gaudin 6:368

City parks: more than meets the eye, by Frances S. Vandervoort 6:376

Cognitive style and its role as a predictor of student success in the biology classroom, by Claudia B. Douglass 6:368

Computer simulated laboratories for teaching investigation in genetics and population dynamics, by Thomas Mercer Hursh and Ruth Von Blum 6:370

Computer simulation of biology laboratory exercises, by Emmett L. Wright 6:376

A contract approach to introductory botany, by Rosalie J. Akey 6:366

Contributions of an environmental institute to undergraduate education, by Richard L. Verch 6:376

Correlates of attitude modification of biology majors and nonbiology majors, by R. A. Garcia 6:368

Creationism: does it belong in the biology curriculum? by Gerald Skoog 6:375

Critical evaluation of human ethology in the light of biological concept of the sigmoid growth curve, by M. N. Mahadeva 6:372

The current status of education in the Soviet Union and its implications for American educators, by Dorothy M. Andrews 6:366

A descriptive study concerning the ecology that science teachers teach, by LeVon Balzer and Jal Parakh 6:367

Ecology of a stream, by Chung Wha Iyengar 6:370

Ecology students need more earth science, by Scott F. Burns 6:367

The effect of demand versus scheduled testing on student achievement, by Robert N. Hurst and Terrance O'Heron 6:370

Encouraging personal decision making by high school biology students regarding the theories of the origin of life-creation/ evolution debate, by Lawrence E. Armstrong 6:367

Evolutionary origins of the outer mitochondrial membrane, by Conrad Weiler 6:376

Factors affecting the sex ratio of participants in extracurricular science programs, by Charles R. Granger 6:369

Field studies in ecology and environmental problems (collegiate level summer study program for high school students), by C.T. Lange 6:371

Futuristics and biology: a new theme for science education, by Garland E. Johnson 6:371

Genetic control in diploid tetraploid teleostean fish, by Conrad Weiler 6:376

Head to toe isolations-a profile of your body flora, by Mary R. Parker 6:374 How to take an extended field trip for pea-

nuts, by Bill Norris 6:373 Human biology: meeting future expectations, by Paul DeHart Hurd 6:370

Individualized audio-tutorial instruction for inner city minority students---panacea or pitfall? by Floyd H. Nordland 6:373

An in-school hematology field trip: American Red Cross blood donation program, by Frances Ness 6:373

An instructional model for teaching skills of independent investigation, by Ruth Von Blum and Thomas Mercer Hursh 6:376

Kansas biology students in the Colorado wilderness by Kenneth Highfill 6:369

LD/EH biology-mainstream or CRT? by Laurence A. Slavin 6:375

The learning of biology: some recent developments and suggested lines for future study, by Darrel L. Murray 6:372

The index has three parts: subjects, titles, and authors. Alphabetizing is letter by letter (not word-by-word); for example, "Educational" would precede "Education theory."



A MUST FOR SCIENCE TEACHERS



OLUTIONS . AQUARIUM WATER LaMatte Chemica

GF FIRE CHAMICAL PRODUCTS COMPANY AMOTTE CHEMICAL PRODUCTS COMPANY CHESTERTOWN, MARYLAND 21628 301-778-3100 Serving Science and Industry since 1919

Mountain ecology: an interdisciplinary approach to the study of a specific ecosystem, by Scott F. Burns 6:367

A multisensory inquiry approach to classification, by Stephen J. Zipko 6:388

PACT—To improve science literacy, by Isabel S. Abrams 6:366

Prairie reconstruction: an enduring learning experience by Daryl D. Smith 6:375

Preparing high school biology teachers for the 1970s, by Elizabeth Mallon 6:372 The preparation of modular materials for use

The preparation of modular materials for use in investigations, by Darrel L. Murray 6:373

Quality environmental plan for land-use laboratory activity, by Gary Peterson 6:374

Recycle that frog, by Virgil A. Sestini 6:374 Seasonal movements of caribou in the vicinity of the Trans-Alaska pipeline on Alaska's arctic slope, by W. T. Smith, R. D. Cameron, and K. R. Whitten

Spectrometric assay of the Emerson enhancement effect: a student demonstration, by Alan R. Orr 6:373

A study of student behavior in regard to the posting of test results, by R. Harvard Riches 6:374

Utilizing the American Red Cross in the implementation of a high school water quality assessment project, by David W. Martin 6:372

Skeletal muscle as a peripheral modifier of behavior, by Robert L. Jenkins 6:370

SSTP biochemistry at the University of Iowa, summer 1976, by Donald F. Treagust and John Cody 6:375

A teacher's belief system and its relationship to the cognitive level of questioning used by the teacher, by Donald Harvey Glittenberg 6:369

A teacher inservice model for environmental health science, by Elaine J. Anderson 6:366

Teaching three-dimensional biology using two-dimensional visual media, by Dan R. Jones 6:371

Testing behavior of wood ducks (Aix sponsa) in New Jersey, by Stephen J. Zipko 6:388

The unnatural Mississippi: a resource under man's influence for better or worse, by C. T. Lange 6:372

The use of competencies in the preservice methods for prospective biology teachers, by Harold Foss 6:368

Valuing the environment, by Stephen L. Canipe 6:367

Wilderness experience, by James A. Collier 6:368

The zoo as a classroom, by Ed Schmitt and Dan Van Gorp 6:374

Reviews

Abortion and the sanctity of human life: a philosophical view (Brody) 6:383
Action biology (Weinberg and Stolze) 1:57
A closer look (Godfrey) 6:377

Air: an intermediate science unit (Newton and Geis) 6:380

Demonstrate Embryology



Recapitulate Evolution



In Your Classroom

A fascinating LIVE demonstration of fertilization, mitosis and developmental biology is made simple with our Embryology Kit. Contains ripe sea urchins and

the necessary labware.
Other living marine organisms
and collections also available
Ask for free catalogue "1076

Suggested for schools within a radius of 50 miles from a commercial airport.

Pacific Bio-Marine Laboratories Inc.
Box 536

Venice, Calif. 90291 (213) 397-9702 or 397-7281

Alcoholism (Silverstein) 7:448
Alcohol—proof of what? (Lee) 7:449
American astronauts and spacecraft (Knight: ed.) 5:316

American sportsmen and the origins of conservation (Reiger) 5:315

Among the elephants (Douglas-Hamilton and Douglas-Hamilton) 1:55

Anatomy and physiology, 2nd ed. (Evans) 9:560

Animals and their world (McGraw-Hill Films) 6:385

An approach to problem solving in genetics (Myers, Gilmore, and Englert) 8:510
Aquarium fishes in color (Madsen) 1:60

Avian physiology (Sturkie, ed.) 9:561 Basic chemistry: a programmed presentation

(Brooks and Norton) 8:506 Beginning biochemistry (Berman) 7:451 Bio graffiti: a natural selection (Burns)

Biological awareness: statements for selfdiscovery (Edington and Cunningham) 5:316

Biology (Goldsby) 7:446

Biology: an inquiry into the nature of life (Weinburg) 1:57

Biology: and its relation to mankind (Winchester) 1:57

Biology bingo (Newton) 7:445

Biology enrichment filmstrip/cassette program (Silver Burdett Co.) 4:259

Biology laboratory manual (Winchester) 3:187

Biology puzzles and puzzlers (O'Neill) 7:446 Biology: you and your environment (Cunningham) 8:507

Biorhythm: a personal science (Gittelson) 4:254

Bio-stereo: biology in three dimensions (BSCS) 5:317

The California land: planning for the people (California Land Use Task Force) 7:444 A closer look at deserts (Pitt and Cook) 4:258

A closer look at dogs (Pitt and Cook)

Comfrey: food, fodder and remedy (Hills) 9:558

Communities of living things (Arthur Barr Productions, Inc.) 2:125

Comparative physiology of animals: an environmental approach (Hill) 9:560

Conceptual foundations of genetics (Corwin and Jenkins) 9:560

Concise color encyclopedia (Kerrod) 2:123 Confluent education in science (Romey) 7:445

Cottonwood (West Wind Productions) 3:189

Crowding and behavior (Freedman) 2:120

Dangerous sea creatures (Helm) 9:562 Discussing death: a guide to death education (Mills, Reisler, Robinson and Vermilye) 6:382

DNA: the key to life (Parker, Reynolds, and Reynolds) 3:184

The earth manual (Margolin) 2:121

Eat, drink and be wary (Churchill Films)
4:260

Ecological principles (Tribe, Eraut and Snook) 3:185

Ecology: the link between the natural and social sciences (Odum) 2nd ed. 2:120

The ecology of man: an ecosystem approach, 2nd ed. (Smith, ed.) 8:507

Ecology: wanted—alive! (Aims Instructional Media Services) 2:126

The economy of nature (Ricklefs) 7:444
Electron microscopy and cell structure
(Tribe, Eraut, and Snook) 5:315

Elements of biology, Vol. 1 (Nair and Kamath) 1:57

The enduring effects of education (Hyman, Wright and Reed) 4:256

Energy and environment: the four energy crises (Miller) 6:378

Energy, earth and everyone (Gabel) 6:378 Environmental careers (Hahn and Hahn) 8:508

Environmental education: a guide to information sources (Stapp and Liston) 6:377 Environmental physiology (Phillips, ed.)

1:60 Evolution of desert biota (Goodall, ed.) 9:559

Evolution of life (Visual Publications) 8:513 Experiments in life science: a laboratory guide (Kaplan) 2nd ed. 8:508

Experiments in physiology (Tharp) 3rd ed. 8:511

Exploring the spectrum (International Film Bureau) 3:190

Exploring your environmental choices (Metropolitan Life, Health and Welfare Division) 5:318

Fifty spirit master activities in environmental science (Newton) 7:446

First aid without panic (Hartley) 7:450

Fishes of the world (Wheeler) 2:124

Flowering plants: evolution above the species level (Stebbins) 1:55

Food: where nutrition, politics and culture meet (Katz and Goodwin) 7:449

Foundations of biophysics (Stanford) 2:122 Fundamentals of ornithology (Van Tyne and Berger) 6:383

Galapagos: laboratory for evolution (Harper and Row, Publishers) 9:563

Great scientists speak again (Eakin) 3:188 History of general physiology, 600 B.C. to A.D. 1900 volumes 1 and 2 (Hall) 6:379

How insects communicate (Patent) 7:443 How life began: creation versus evolution (Gallant) 3:186

Human biology in health and in disease (Burke) 3:188

Human reproduction: biology and social change (Swanson) 1:58

Human sexuality (Goldstein) 7:448 The hungry fly (Dethier) 9:557

Hunting with the microscope (Johnson and Bleifeld) Rev. Ed. 4:258

Impact: science on society (Wolke, ed.) 1:60 Improving reading in science (Thelon) 9:xxx Inquiries into life: interdependence of life; diversity of life (Lang, Palfrey and Van Nieuwenhove) 6:379

Inquiry into life (Mader) 8:509

The international butterfly book (Smart) 6:384

An introduction to genetic analysis (Suzuki and Griffiths) 9:xxx

Introduction to mathematical biology (Rubinow) 7:450

An introduction to modern genetics (Patt and Patt) 3:187

An introduction to the profession of medical technology (Williams and Lindberg) 2nd ed. 2:121

Investigating your environment (Biological Sciences Curriculum Study) 7:443

It's going to sting me! (Rood) 8:511
Kangaroos, opossums, and other marsupials
(Jenkins) 5:317

(Jenkins) 5:317 Keeping live corals and invertebrates (Straughan) 5:316

The laboratory experience: a principles of biology manual (Chiscon, Carlin, Chiscon, Shippe, and Vanable) 8:508

Laboratory experiments in physiology (Grinnell and Barber) 6:380

Land use and misuse (Learning Corporation of America) 6:384

Languages of the animal world (Prince) 8:505

Life in and around freshwater wetlands (Ursin) 2:120

The life of mammals: their anatomy and physiology (Young) 9:561

Light microscopy (Tribe, Eraut, and Snook) 5:315

Limnological botany (Vol. III) (Hutchinson) 8:506

The live classroom: innovation through confluent education and Gestalt (Brown, ed.) 4:256

Living trophies (Batten) 9:562

Man and the environment: an introduction to human ecology and evolution (Boughey) 1:56

Man: the incredible machine (National Geographic Society) 5:319

A manual of anatomy and physiology (Donnesberger, Lesak, and Timmons) 7:450

Measuring the brain gain (Doubleday Multimedia) 8:512

Media review digest (Rigg et al., ed.) 1:61 Metric measurement (United Learning)

6:385 Modern cell biology (McElroy and Swanson) 8:506

Nontraditional college routes to careers (Splaver) 1:56

One species among many (Centron Educational Films) 2:125

Opportunities in environmental careers, (Fanning) 2:121

Opportunities in forestry careers (Demmon) 1:56

Outlines of biochemistry, 4th ed. (Conn and Stumpf) 8:506

Parent birds and their young (Skutch) 8:505 Patterns in biology (Harrison) 1:57





Photosynthesis (Tribe, Eraut and Snook) 3:184

Physiological adaptation to the environment (Vernberg, ed.) 1:59

Plant anatomy (Stevenson and Mertens) 3:183
Plants, an introduction to modern botany

(Greulach and Adams) 6:377
Plants: source of life series (Doubleday Mul-

timedia) 5:319

Plant succession on lava flows (Imperial Educational Resources) 8:513

Plant world (McGraw-Hill Films) 6:386 Principles of anatomy and physiology (Tortora and Anagnostakos) 1:58 Problem solving in biology (Kaplan) 7:447

Physics for biologists (Duncan) 7:451
Ratopolis (National Film Board of Canada)

Ratopolis (National Film Board of Canada) 6:387 The real world of insects (Learning Corpora-

tion of America 8:514 Review of gross anatomy (Pansky and

House) 1:61 River ecology (Whitton, ed.) 6:378

A scanning electron microscope study of green plants (Lott) 8:505

The search for life (Aylesworth) 4:257
Seasons of the salt marsh (Gates) 3:184
Sharing the land (Cinema Associates Productions) 3:191

Social hierarchy and dominance (Schein) 3:183

Sociobiology: the new synthesis (Wilson) 2:119

Surtsey: evolution of life on a volcanic island (Fridriksson) 3:186

Teaching environmental education (Hungerford and Peyton) 9:558

Teaching metric awareness (Kurtz) 6:381
Teaching the future (Kauffman) 2nd ed.
7:444

Terrestrial environments (Cloudsley-Thompson) 4:255

T.E.T: Teacher effectiveness training (Gordon) 1:56

Then one year (Churchill Films) 3:190
Through the molecular maze: a helpful guide to chemistry for beginning life science students (Breen, Rodella and Basmajian) 3:184

The vampire bat: a field study in behavior and ecology (Turner) 2:119

Vertebrates: a laboratory text (Wessels and Center, eds.) 2nd ed. 2:123

We almost lost Detroit (Fuller) 3:189 What makes education environmental? (McInnis and Albrecht, eds.) 3:185

What people eat: an introduction to chemistry and food sciences (Raw, Bromley, Pariser and Vournakis) 6:382

Wild plants in the city (Page and Weaver)

Wildlife: an American heritage (West Wind Productions, Inc.) 2:126

The world of endangered wildlife (National Wildlife Federation) 2:124

Your body and how it works: the ear (Hubbard Scientific Company) 5:318

Author

Abraham, Norman 2:121 R Abrams, Isabel S. 6:366 P Adkins, Dean A. 3:177 F Ahles, Sister Mary Dolores 1:57 R Akey, Rosalie J. 6:366 P 5:305 F Allamong, Joseph K. Allen, Robert D. 1:24 A; 2:122 R Andersen, Nancy A. 1:59 R Anderson, Elaine J. 6:366 P Andrews, Dorothy M. 6:366 P Arbus, William D. 8:501 F Armstrong, Lawrence E. 6:386 R; 6:367 P Arnett, Ross H., Jr., 4:250 A Asteriadis, George T. 8:481 A Baer, Richard A., Jr. 1:49 F; 8:473 A Baker, Jeffrey J. W. 2:116 L; 8:494 F Balzer, LeVon 6:367 P Barman, Charles R. 7:436 F Barnes, William G. 3:188 R Barrow, Lloyd 2:125 R Baumel, Howard B. 1:52 F; 5:302 F Behringer, Marjorie P. 5:304 F; 8:483 F Bennett, W. G. 1:57 R Bentley, Donna 2:121 R; 9:558 R Berg, Donald M. 1:56 R Berger, J. Joel 5:302 F Bindel, Henry J., Jr. 1:56 R Bloom, Arthur 5:292 A Bock, Jane H. 3:186 R Bowen, William R. 3:187 R Bradley, James V. 2:91 A Brandt, Carl F. 1:49 F Branham, Arthur 5:299 F Burgess, Michael N. Burns, Scott F. 6:367 P; 6:367 P Butterfield, Charles H. 1:58 R Canipe, Stephen L. 6:367 P Carpenter, Clyde Joel 4:259 R Carter, Jack L. 3:172 F; 8:513 R Case, Christine L. 2:112 F Cavese, Joseph A. 2:108 A Charles, Brother H. 1:57 R Charlton, Ronald E. 1:62 R Chu, Janet Pattee 2:126 R Cleaver, Thomas J. 2:110 F Cole, E. James 3:190 R Collier, James A. 6:368 P Collins, Michael A. J. 8:491 F Constans, Phyllis 5:292 A Cooley, Arthur P. 8:469 A Crawford, Frances E. 4:260 R Creager, Joan G. 1:13 E; 2:75 E; 3:179 F; 4:203 E; 5:275 E; 6:341 E; 6:354 F; 9:523 E Crowder, L. V. 2:105 A Cummings, Stanley L. 2:120 R; 6:351 A Cutting, Robert H. 6:368 P Danilov, Victor J. 9:524 A Daughtrey, Dorothy D. Dawson, George 2:120 R Deal, Robert 5:318 R DeLisle, Donald G. 3:184 R Douglass, Claudia B. 5:315 R; 6:368 P Dreitlein, George M. 1:40 A Drexler, Edward 2:127 R

The index has three parts: subjects, titles, and authors. Alphabetizing is letter by letter (not word-by-word); for example, "Educational" would precede "Education theory."



Drumlish, M. J. 2:120 R Dwyer, Sister Paulinus 1:56 R Edwards, Arthur W. 1:55 R; 3:190 R Edwards, J. Gordon 6:355 L Eitelbach, Christine 9:cee F Felchner, Gloria 6:368 P Ferner, John W. 5:315 R Ferrell, Barbara 4:257 R Finegold, Menahem 5:284 A Finstad, Carl D. 9:563 R Fischang, William J. 4:204 A Fitz, Franklin 1:53 L Fleming, Michael F. 6:360 F Foss, Harold 6:368 P Foster, Helen M. 7:422 A Fowler, H. Seymour 2:123 R Fraser, Dean 8:466 A Fraulo, Anne 8:512 R Frazier, Susan R. 8:498 F Gantert, Robert L. 3:185 R Garcia, R. A. 6:368 P Garcia, Ric 8:513 R Gardner, Kenneth L. 7:439 F Garner, James M. 5:316 R Gastonguay, Paul R. 2:116 L Gaudin, Felix A. 6:368 P Geller, Lotte R. 2:119 R; 5:295 F; 9:557 R Glittenberg, Donald Harvey 6:369 P Goldstein, Philip 1:55 R Gonzalez, Marian C. 6:384 R Good, Ronald G. 7:407 A Goodman, Nancy R. 7:402 A Gottlieb, Sheldon F. 3:148 A; 7:441 F Grand, Theodore I. 3:150 A Granger, Charles R. 6:369 P Gray, Alice 4:211 A Greene, Joyce G. 6:369 P Grissom, Audrey 5:300 F Guckin, John P. 7:436 F Hadow, Harlo H. 4:255 R; 9:528 A Haley, Suzanne B. 7:407 A Haman, A. C. 8:515 R Hardin, Garrett 8:465 E Harper, Curt 3:184 R Harrison, George W. 1:53 L Hawk, J. A. 2:105 A Heinze, Jane 9:542 F Hendrix, John C. 6:387 R Henzlik, Raymond E. 4:254 R Hertig, Willis H. 9:543 F Hibbs, E. Thomas 5:281 A Hickman, Faith 1:61 R Higgins, Terrance L. 3:184 R Highfill, Kenneth 6:369 P Hill, Ronald D. 8:500 F Hintz, Howard W. 6:355 L Hirschy, Robert A. 6:369 P Hoskins, Betty B. 9:533 A Howard, R. Bill 2:125 R Huffman, Donald M. 3:187 R Humphreys, Donald 1:56 R Hurd, Paul DeHart 2:79 A; 6:370 P Hursh, Thomas Mercer 6:370 P Hurst, Robert N. 2:123 R; 6:370 P Iyengar, Chung Wha 6:370 P Jackson, Crawford G., Jr. 5:317 R Jantzen, Paul G. 3:157 A Jenkins, Robert L. 6:370 P Jernigan, H. Dean 1:57 R; 5:317 R Johnson, Garland E. 6:371 P Johnson, Sister Marion 4:258 R Jones, Alan 2:93 A Jones, Dan R. 6:371 P Jukes, Thomas H. 3:162 A Jungck, John R. 3:186 R Kahle, Jane B. 6:371 P

Join us in our 50th BIRTHDAY CELEBRATION

SPECIAL ANNIVERSARY ISSUE

includes

- · 10 major review articles of lasting value and significance
- · 100 pages of book reviews-important, literate, witty

selected by the Editors & Advisory Board from the past 50 years of the QRB



1926 to 1976



A 425-page bibliophile's delight.—deluxe golden aniversary issue cover: gold-on-red, plastic laminated for durability.

Special Price for MASE members

\$12.50

limited printing

order now from

THE QUARTERLY REVIEW OF BIOLOGY Division of Biological Sciences State University of New York Stony Brook, N.Y. 11794 USA

(please add \$1.00 for shipment outside the United States)

Kaye, Jeff 6:348 A Kelley, George W. 5:316 R Keller, Dolores 1:62 R Kelver, Gerald O. 2:124 R Kennedy, Patrick A. 6:385 R Kent, Gyann 1:34 A Killpack, Merlin L. 5:318 R Kimball, Thomas L. 7:419 A Kimbrough, T. Daniel 7:434 F King, Barbara A. 3:184 R Kinkead, Ralph 7:443 R Kinraide, Thomas B. 3:188 R Kleinschuster, Stephen J. 8:506 R Koch, Rudy G. 4:256 R Koevenig, J. L. 6:371 P Kolb, Haven 1:48 F Kormondy, Edward J. 2:94 A Kozinski, Robert J. 9:550 F Lange, C. T. 6:371 P; 6:372 P

Lanham, Willie J. 4:258 R
Lattin, John D. 4:231 A
Lawson, Fred A. 6:384 R
Leonard, William H. 8:477 A
Liebherr, Harold G. 7:443 R
Lien, Violetta 5:319 R
Leisman, Gilbert A. 3:183 R
Lesh-Laurie, Georgia E. 5:316 R
Levin, Carolyn M. 6:380 R
Levin, James 6:357 F
Lewis, Diane 4:256 R
Liberman, Laura 6:365 F
Ligon, Glenn 5:296 F
Lindbergh, Jon M. 2:76 A
Llewellyn, Gerald C. 3:185 R; 7:434 F
Logsdon, Donald F. 7:451 R
Lowery, Lawrence F. 8:477 A
Lutton, L. M. 7:433 F
Lyng, R. Douglas 5:298 F

SOCIAL IMPLICATIONS OF BIOLOGICAL EDUCATION

Edited by

Arnold B. Grobman

Teachers and students of life sciences are forced to consider the social implications of biology. The important issues can not be avoided and deserve a full and balanced discussion.

Recognizing this need, the National Association of Biology Teachers invited distinguished biologists to address themselves to a variety of social issues. The result has been a volume ideally suited as a resource for class discussion and as a reference for the teacher of either life sciences or humanities.

The volume includes chapters on the social implications of . . .

Medicina

by Michael and Lois DeBakey

Rehavior

by James V. McConnell

Genetic

by Bruce Wallace

Population

by Garrett Hardin

Evolution

by Claude A. Welch

Additional statements are given by Vincent Dethier, Martin Schein, Haven Kolb, David Denker, Lawrence Mann and others. This book is available now from the National Association of Biology Teachers for only \$1.95.

NABT

11250 Roger Bacon Drive Reston, Va. 22090

Please	mail	со	pies of	Social	
Implications of Biological Education					
at \$1.9	5 per co	ру.	1151	-	
☐ Pay	ment En	closed	□ Bil	l Me	
Name.				(1)	
	_				
Addres	5		train a		

Llewellyn, Gerald C. 3:185 R; 7:434 F Macbeth, Norman 8:495 F Mader, Sylvia S. 6:378 R; 7:450 R Mahadeva, Madhu N. 6:379 R; 6:372 P Mallon, Elizabeth J. 1:28 A; 6:372 P Mandt, Douglas K. 5:318 R Marie, Sister Ignatia 7:445 R Mariner, James L. 3:141 E Martin, David W. 6:372 P Mason, Donald 1:57 R; 7:450 R Maurer, Jerry P. 7:440 F Mayer, William V. 1:60 R; 2:118 L Mazur, Jane 7:448 R McBurney, Wendell F. 6:379 R McCall, Tom L. 3:142 A McCleary, James A. 6:378 R McElroy, L. James 3:175 F McIntosh, Marion C. 6:355 L McKinnon, Neil J. 6:378 R Mercado, A. Morgan 5:296 F Mertens, Thomas R. 5:288 A Meyer, Arthur D. 6:384 R Meyer, James H. 7:417 A Minnick, D. R. 4:242 A Moehring, Sister Pamela 5:319 R Monson, Paul H. 6:377 R Mulé, Louis P. 2:121 R; 6:377 R Murray, Darrel L. 1:43 A; 6:372 P; 6:373 P Naismith, Robert W. 6:383 R Nelson, Richard 8:506 R Ness, Frances 6:373 P Nordland, Floyd H. 6:373 P Norton, Frank 5:297 F Norris, Bill 6:373 P Novak, Alfred 6:382 R Nuckolls, Elizabeth P. 7:450 R; 8:507 R Nystrom, Sherman C. 6:373 P Olsen, Ingrith D. 2:88 A; 7:444 R Olsen, Richard W. 7:405 A; 9:554 F Olsen, Sigurd 2:88 A Orr, Alan R. 6:373 P; 7:451 R Ost, David H. 5:277 A; 6:379 R; 7:401 E Palas, Sister Kathryn S. C. 2:98 A Pancella, John R. 6:381 R Parker, Mary R. 6:374 P Patterson, Robert 7:444 R Pempel, Alice McDowell 1:49 F Pennak, Robert W. 6:377 R Perfetti, Patricia Bytnar 6:342 A Peterson, Gary 6:374 P Petry, Douglas E. 7:405 A; 9:554 F Phillips, R. E. 1:16 A Pimentel, David 7:402 A Pitkow, Howard S. 1:61 R; 8:506 R Pius, Sister M. 9:561 R Plapp, Frederick W. 4:239 Pogge, Alfred E. 8:508 R Poscover, Benjamin F. 6:385 R Postiglione, Ralph 2:113 F Potts, George D. 9:544 F Powell, Richard C. 7:445 R; 7:446 R; 7:446 R Pravetz, Matthew A. 6:380 R Protopapas, Paul 9:546 F Quackenbush, Roger E. 7:431 F Quimby, Lucy W. 9:559 R Rabb, Donald D. 9:560 R Ransom, John D. 7:447 R Ratzlaff, George H. 8:505 R Reeder, Bob 7:446 R Reginella, Sister M. Olivia 6:346 A Reymann, Joseph A. 8:511 R Reynolds, Larry 7:448 R Riches, R. Harvard 6:374 P Rickson, Fred R. 9:558 R Ring, Elizabeth D. 8:486 F

Risley, Betty 7:449 R Ritcher, Paul O. 4:235 A Robbins, Wayne A. 8:508 R Roberts, Godfrey 8:510 R Roblin, Richard 3:144 A Rosen, Walter G. 3:189 R; 7:449 R Royce, George 3:191 R Rusch, John J. 7:436 F Sauer, Richard J. 4:216 A Saxer, Robert L. 9:rls F Schein, Martin W. 8:505 R Shleicher, Sister Jeanne d'Arc 8:506 R Schlenker, Richard M. 8:494 F Schmitt, Ed 6:374 P Schmude, Rick 9:562 R Scruggs, Joan R. 7:444 R Sears, Paul 1:14 A Seevers, Elmer R. 2:117 L Sestini, Virgil A. 6:374 P; 6:374 P Sharp, Aaron J. 9:558 R Shields, Lester D. 9:562 R Simmerer, Albertine 56 R Simpson, Ronald D. 1:34 A; 1:58 R; 8-509 R Shields, Lester D. 9:xxx R Simpson, Ronald D. 1:34 A; 1:58 R; 8:509 R Skelton, Thomas E. 4:208 A Skoog, Gerald 6:375 P Slavin, Laurence E. 2:102 A; 6:375 P Smith, Bruce N. 8:505 R Smith, Daryl D. 6:375 P Smith, Edward H. 4:246 A Smith, W. T. 6:375 P Snyder, Gordon 9:560 R Speer, Henry L. 3:174 F Squires, Alice R. 7:426 A Stein, Howard J. 8:489 F; 8:508 R Stocking, Steve 6:355 L Stoffolano, John G., Jr. 4:222 A Strandquist, James 5:301 F Streubel, Donald P. 6:375 P Strome, Phoebe 9:557 R Stronck, David R. 1:19 A; 8:507 R Sweet, Haven C. 1:55 R Szabo, Michael 3:189 R Tamir, Pinchas 1:50 F Taves, Don R. 5:298 F Taylor, Nancy 7:434 F Thall, Richard V. 7:413 A Tipton, V. J. 4:205 A Treagust, David F. 6:375 P VanBuskirk, Robert G. 6:358 F Vandervoort, Frances S. 6:376 P Verch, Richard L. 6:376 P Vigue, Charles L. 9:537 A VonBlum, Ruth 6:376 P Wallesz, David P. 8:497 F Watson, C. A. 1:16 A Watson, Margaret L. 8:511 R Weiler, Conrad 6:365 F; 6:376 P; 6:376 P Weinberg, Eugene D. 8:466 A West, George G. 2:124 R; 9:559 R Western, Dorothy E. 9:551 F Whelchel, Stanley D. White, Marjorie 5:297 F Williams, Olwen 9:562 R Winchester, A.M. 9:559 R Wise, Mary 6:382 R Wright, Emmett L. 6:376 P Wurzelbacher, Thelma Marie 3:168 A Yeany, Russell H., Jr. 6:359 F Yelin, Estelle 1:60 R Yokum, Nanci G. 5:281 A Yongue, William H., Jr. 1:60 R Young, Sharon 2:119 R; 9:560 R Zipko, Stephen J. 6:388 P; 6:388 P; 6:388 P

